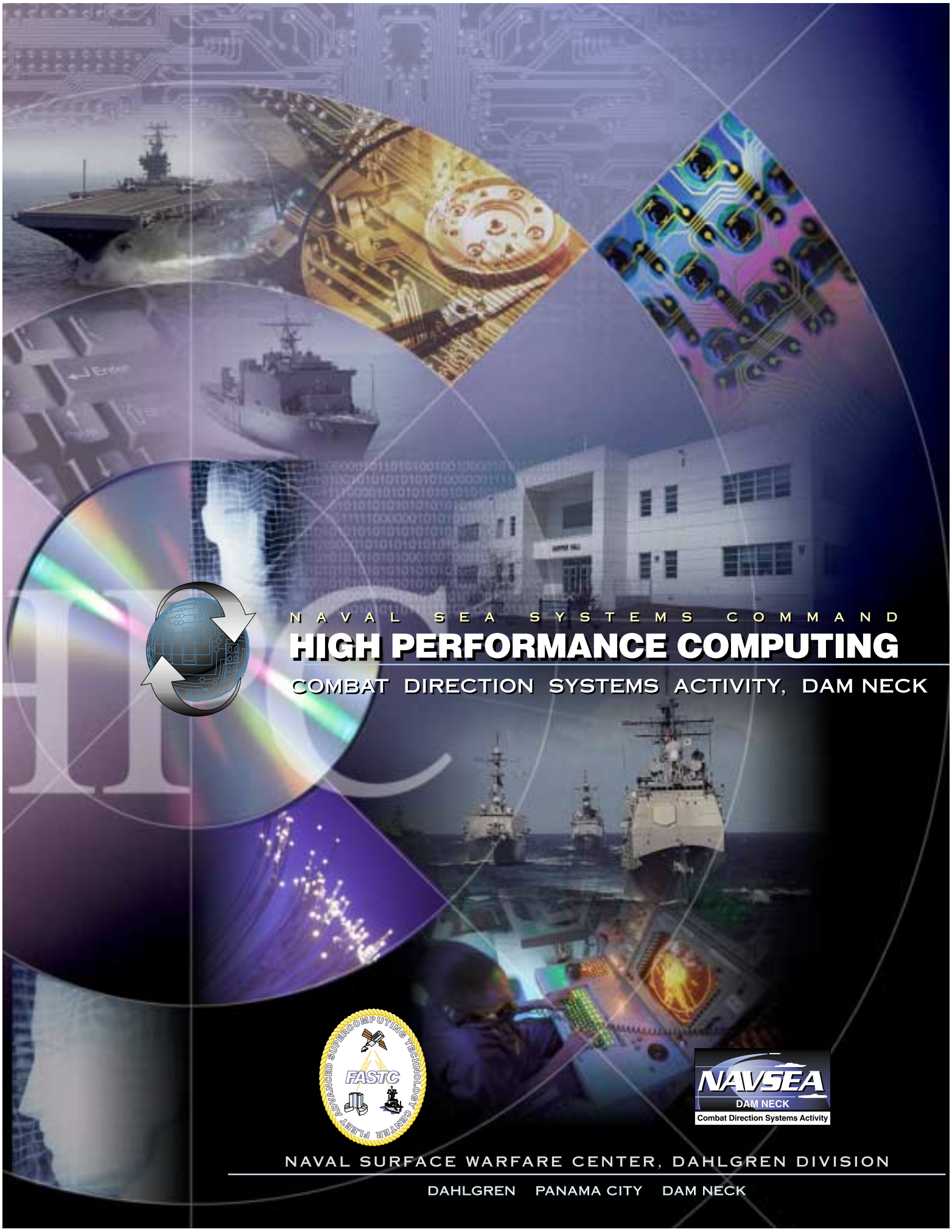
NAVAL SEA SYSTEMS COMMAND
HIGH PERFORMANCE COMPUTING
COMBAT DIRECTION SYSTEMS ACTIVITY, DAM NECK
FASTC
ADVANCED SUPERCOMPUTING TECHNOLOGY CENTER FLEET
NAVSEA
DAM NECK
Combat Direction Systems Activity
NAVAL SURFACE WARFARE CENTER, DAHLGREN DIVISION
DAHLGREN PANAMA CITY DAM NECK

Background

High Performance Computing (HPC), also known as supercomputing, has traditionally been used to support the science and technology communities. The engineering community has in recent years begun to use the computational resources offered by HPC to support development and testing of hardware systems such as high-performance aircraft. Even with this increased use, HPC has remained a tool of the privileged few. Combat Direction Systems Activity (CDSA), Dam Neck, in conjunction with Southeastern Virginia business and academic leaders, saw a bigger need and is taking the lead in moving high performance computing to the masses.

A Fleet-Centered Perspective

The Fleet Advanced Supercomputing Technology Center (FASTC) was established to bring supercomputing out of the universities and laboratories and into the front lines of warfighter support.

The FASTC is collocated with the Multi-Functional Land Based Test Site at CDSA Dam Neck, where it can directly support data collection during test events such as Cooperative Engagement Capability (CEC) and Distributed Engineering Plant (DEP) testing.

Taking Supercomputing to the Fleet

The vision for the Fleet Advanced Supercomputing Technology Center is to directly support the Fleet by (1) providing substantial increases in the performance and fidelity of training and test and evaluation (T&E) applications by solving problems such as Integrated Systems Engineering Activity (ISEA) support, including failure prediction and analysis as well as parts supply prediction in conjunction with the Integrated Condition Assessment System (ICAS) and (2) by providing more efficient methods for collaborative engineering and tactical decision-making.

Partnerships with academic institutions such as Old Dominion University and Virginia Polytechnic Institute and State University ensure that the Center stays on the cutting edge of computing and visualization technologies.

FASTC Equipment Suite

- 32-Processor SGI Origin 2000 (Classified)
- 8-Processor SGI Origin 2000 (Unclassified)
- 2-Processor SGI Onyx2 Graphics System (Multiple Classifications)
- 512-GB RAID Storage (Classified)
- 512-GB RAID Storage (Unclassified)
- 3.5-TB Near-Line Tape Storage (Classified)
- FakeSpace ImmersaDesk 3-D Visualization System
- SGI and Linux Work Stations (Classified and Unclassified)

NAVSEA DAM NECK Combat Direction Systems Activity

NSWCDD/MP-01/39: 4/01

For additional information, please contact:
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Telephone: (757) 492-6312
Or visit us at: http://www.navseadn.navy.mil

We are looking for scientists and engineers in different fields.
For employment opportunities, please send your résumé to:
CDSA College Recruiting Program
Management Assistance Office
1922 Regulus Avenue
Virginia Beach, Virginia 23461-2097
Telephone: (757) 492-7618